



## Air Quality in Emergency Response: *Monitoring, Modeling, Messaging, and Media*



2008 CARPA Summit  
Air Response Training Program  
October 15 - 16, 2008  
Holiday Inn, Capitol Plaza | Sacramento, CA



[www.arb.ca.gov/ertcomm/ertcomm.htm](http://www.arb.ca.gov/ertcomm/ertcomm.htm)

# STEERING COMMITTEE

## CARPA Steering Committee Members

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## CARPA Steering Committee Member Organizations

California Environmental Protection Agency

 **Air Resources Board**





## **Mission Statement**

To provide actionable incident response information to protect public health and the environment from the impacts of accidental or deliberate releases of hazardous compounds into the air.

The Air Resources Board, with the assistance of the Governor's Office of Emergency Services, and the US Environmental Protection Agency, Region 9, recognize the need to strengthen this component of the emergency response program in California. The group formed a Steering Committee of technical response leaders, their representatives, and government health professionals to improve California's overall air response preparedness.

Airborne emissions from industrial accidents and disasters can cause a range of debilitating effects on those in the vicinity of an incident that can range from mild to potentially life threatening. Responders must assess the impacts rapidly and potentially call for evacuations. A timely and credible response is critical. This task falls primarily with local responders. However, when events overwhelm local responders' capability, other groups, either government agencies, or contractors with specialized assets under the direction of state and federal agencies, are needed. Government agencies with sophisticated laboratory, monitoring, and modeling expertise can join local responders especially when it comes to large accidents or those involving complex mixtures.

In particular, the group's charge is to address means to improve air quality assessments to make them useful and provide public health officials with actionable information. The general areas the Committee is working on include raising awareness among California's response community of existing and potential capabilities, exploring measurement and assessment tools, improving cooperation and coordination among groups, and enhancing, cataloging, and disseminating information on credible response methods and practices to groups throughout the state.

The CARPA Steering Committee is exploring critical capabilities and identifying strengths and shortfalls of existing tools and means of evaluating air concentrations during an emergency release. With input from the group's health members, the Steering Committee has enlisted the help of experts in various fields to recommend and/or improve basic response capabilities, establish lasting relationships between response groups, and develop, as needed, official aid agreements to leverage the results of the group to improve response capability in the state as a whole.

# ACKNOWLEDGEMENTS

On behalf of the CARPA Steering Committee we extend our sincere appreciation to the US Environmental Protection Agency and the California Department of Public Health for their generosity toward the CARPA Summit Scholarship Program, whose combined contributions provided more than fifty participant scholarships. We also wish to thank the California Air Pollution Control Officers Association for their assistance in managing the scholarship program. Again, thank you for your generosity and support of the 2008 CARPA Summit.

Thank you to the exhibitors contributing raffle prizes.



# WELCOME

## WELCOME CARPA SUMMIT 2008!

Welcome to the inaugural *CARPA Summit – Air Quality in Emergency Response: Monitoring, Modeling, Messaging, and Media* – A training summit for building a network of local, state and federal air and public health resources to improve coordinated responses to major air incidents.

We have designed this summit to provide opportunities to learn about challenges and successes of deploying resources (equipment and personnel) during emergencies. We also plan to develop best practices for interpreting air quality data within accepted health indices and for clear and effective messaging about hazards during a rapidly evolving emergency situation.

It is through this training summit that we will come together across jurisdictions and disciplines to understand our unique and sometimes overlapping roles during major air releases. We do not yet have all the tools and networks built; however, this summit is a starting place and an opportunity for all of us to prepare for the eventuality of our active role in future emergencies. Our purpose and desired outcomes for this training summit are:

**Purpose:** Build a network of local, state and federal air and public health resources to improve coordinated responses to major air incidents. This training summit will provide opportunities to learn about: challenges and successes of deploying a network of air monitors, as well as how to access them as a resource; how modeling is conducted and what the outcomes mean; how to interpret the information using the various health indices available; how to become integrated into the incident response system; and how to develop effective and coordinated messages to the public in a rapidly evolving emergency situation. The focus of the training summit will be on large air releases of toxic industrial chemicals and materials, and wildland and industrial fires.

**Outcomes:** Education, relationship building and statewide networking, partnering, appreciation of the issues and their complexity, understanding of the roles of all parties, education on best practices, identifying cross cutting issues, strengths and weaknesses, and addressing the gaps and needs.

In closing, we extend our sincere appreciation to the many CARPA Steering Committee members for their countless hours of planning and coordinating the training summit. Special recognition goes to Dr. Kevin Chao, California Department of Public Health; Dimitri Stanich, California Air Resources Board; Pat Wong, California Air Resources Board; and Dan Shane, US Environmental Protection Agency, Region 9 for their tireless contributions to the planning of this Summit. Lastly, we thank the fine speakers, panelists and exhibitors that have contributed their time and efforts to ensure that the 2008 CARPA Summit is successful. Your contributions are greatly appreciated.

We hope you enjoy the conference and look forward to working together to improve coordinated responses to major air incidents throughout the state of California.

*Now, let's get started!*



**Jeff Cook**  
CARPA Co-Chair  
California Air Resources Board



**John Kennedy**  
CARPA Co-Chair  
US Environmental Protection Agency

# AGENDA AT-A-GLANCE

Tuesday, October 14, 2008	
2:00 p.m.	Registration Opens ..... <i>Ballroom Foyer</i>
6:00 p.m.	Exhibitor Registration and Installation..... <i>Ballroom Foyer</i>
Wednesday, October 15, 2008	
7:30 a.m.	Registration..... <i>Ballroom Foyer</i>
7:30 a.m.	Continental Breakfast and Exhibit Viewing..... <i>Granada/Hermosa/Calaveras/North Lobby Valet</i>
8:30 a.m.	Welcome and Opening Remarks ..... <i>Fresno/El Dorado/Diablo</i>
9:30 a.m.	Federal, State and Local Perspectives ..... <i>Fresno/El Dorado/Diablo</i>
10:15 a.m.	Refreshment Break and Exhibit Viewing..... <i>Granada/Hermosa/Calaveras</i>
10:30 a.m.	ICS/SEMS Training-Overview for Emergency Air Responders ..... <i>Fresno/El Dorado/Diablo</i>
11:15 a.m.	Hosted Luncheon "Air-Borne Emergency Response Procedures" ..... <i>California</i>
12:30 p.m.	Session I – "Data" Presentation ..... <i>Fresno/El Dorado/Diablo</i>
1:45 p.m.	Interactive Networking Activity..... <i>California</i>
2:15 p.m.	Session II – "Data to Message" Presentation ..... <i>Fresno/El Dorado/Diablo</i>
3:30 p.m.	Refreshment Break and Exhibit Viewing..... <i>Granada/Hermosa/Calaveras</i>
3:45 p.m.	Session III – "Message" Presentation..... <i>Fresno/El Dorado/Diablo</i>
5:00 p.m.	Summation of Day One ..... <i>Fresno/El Dorado/Diablo</i>
5:15 p.m.	Refreshment Break and Exhibit Viewing..... <i>Granada/Hermosa/Calaveras</i>
6:00 p.m.	Networking Reception..... <i>John Q. Ballroom (16th Floor)</i>
8:00 p.m.	Open Evening Activities
Thursday, October 16, 2008	
7:30 a.m.	Registration..... <i>Ballroom Foyer</i>
7:30 a.m.	Exhibit Viewing ..... <i>Granada/Hermosa/Calaveras/North Lobby Valet</i>
7:30 a.m.	Continental Breakfast and Opening Remarks ..... <i>California</i>
8:30 a.m.	Concurrent Breakout Sessions and Discussion Forums
8:30 a.m.	Breakout Session I – "Data" ..... <i>El Dorado/Diablo</i>
8:30 a.m.	Breakout Session II – "Data to Message" ..... <i>Fresno</i>
8:30 a.m.	Breakout Session III – "Message" ..... <i>Balboa</i>
11:30 a.m.	Hosted Luncheon and Decision Makers Panel Discussion..... <i>California</i>
12:45 p.m.	Debrief Breakout Sessions and Discussion Forums..... <i>California</i>
1:15 pm	2007 San Diego Fires – Lessons Learned ..... <i>California</i>
1:45 p.m.	Brief Break and Exhibition Viewing ..... <i>Granada/Hermosa/Calaveras/North Lobby Valet</i>
2:00 p.m.	Tabletop Exercises – Air Incident Response..... <i>California</i>
3:15 p.m.	Refreshment Break and Exhibit Viewing..... <i>California</i>
3:30 p.m.	Debrief Air Incident Response Tabletop Exercise..... <i>California</i>
4:00 p.m.	Closing Remarks and Next Steps..... <i>California</i>
4:30 p.m.	Adjourn

# EXECUTIVE PRESENTERS

## Mary D. Nichols, JD

Mary D. Nichols, JD, was appointed Chair of the California Air Resources Board in July 2007, a post she held previously under Gov. Jerry Brown Jr. from 1979 to 1983. At California ARB she is responsible for implementing California's landmark greenhouse gas emissions legislation as well as setting air pollution standards for motor vehicles and fuels. After graduating from Cornell University and Yale Law School, Ms. Nichols practiced environmental law in Los Angeles, bringing cases on behalf of environmental and public health organizations to enforce state and federal clean air legislation. President Clinton appointed her to head the Office of Air and Radiation at US EPA, where she was responsible for, among many other regulatory breakthroughs, the acid rain trading program and setting the first air quality standard for fine particles. She also served as California's Secretary for Natural Resources from 1999 to 2003. Prior to her return to the ARB, Ms. Nichols was Professor of Law and Director of the Institute of the Environment at UCLA.



Human Services, and the Director of the Department of Health Services on public health issues. Dr. Horton previously served as the Deputy Agency Director and Health Officer for the County of Orange Health Care Agency from 1999 to 2005. Prior to that, he was Vice President for Community Programs, Director of the Center for Child Protection, and Director of the Center for Healthier Communities for Children at San Diego Children's Hospital and Health Center from 1997 to 1999. Dr. Horton currently serves on the executive committee of the Association of State and Territorial Health Officials and is a diplomat of the American Board of Pediatrics. Dr. Horton obtained his Masters of Science degree in Public Health from the University of North Carolina and his Medical Doctorate from St. Louis University.

## Wayne Nastri

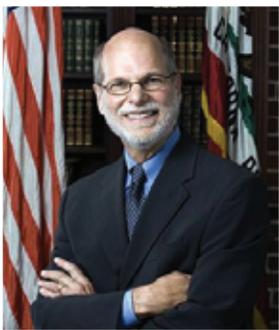
Wayne Nastri was appointed the United States Environmental Protection Agency Regional Administrator for Region 9 in October 2001. Mr. Nastri has led the Region in meeting the West's environmental challenges, especially



in improving air quality and protecting scarce water resources throughout the arid west. Clear communication, strong enforcement and accountability to the public for a measurable "bottom line" have been the hallmarks of his tenure. A strong proponent of partnership as the best route to environmental protection, Mr. Nastri has launched many innovative and creative collaborations to protect the health and environment of all those who live in the Pacific Southwest. Prior to his appointment, Mr. Nastri held various environmental leadership positions, including membership on the Governing Board for the South Coast Air Quality Management District, as well as participation in numerous California Environmental Protection Agency advisory boards. He has more than fifteen years of environmental consulting experience and working in a variety of media. Prior to his appointment with United States Environmental Protection Agency, he was President of Environmental Mediation Inc., an environmental and government relations firm.

## Mark B. Horton, MD, MSPH

Mark B. Horton, MD, MSPH is a State Public Health Officer, and Director of the California Department of Public Health. Dr. Mark Horton was appointed by Governor Arnold Schwarzenegger as State Public Health Officer and Director of the California Department of Public Health, effective July 2007. As Director, Dr. Horton provides leadership for programs responsible for public health, disaster preparedness, and disease prevention for all Californians. With more than 30 years of experience, Dr. Horton has a strong background in public health programs and clinical practice. From November 2005 through June 2007, Dr. Horton served as State Public Health Officer and Chief Deputy Director of the California Department of Health Services. During that time he advised the Governor, the Secretary of Health and



# AGENDA

## Tuesday, October 14, 2008

2:00 p.m. – 6:00 p.m.	<b>Registration Opens</b> .....Ballroom Foyer
6:00 p.m. – 9:00 p.m.	<b>Exhibitor Registration and Installation</b> .....Ballroom Foyer

## Wednesday, October 15, 2008

7:30 a.m. – 8:30 a.m.	<p><b>Registration</b>.....Ballroom Foyer</p> <p><b>Continental Breakfast and Exhibit Viewing</b>.....Granada/Hermosa/Calaveras</p> <p><b>Outdoor Exhibit Viewing/Air Sampling and Laboratory Mobile Units</b>..... North Lobby Valet</p>
8:30 a.m. – 9:30 a.m.	<p><b>Welcome and Opening Remarks</b>.....Fresno/El Dorado/Diablo</p> <p><i>Mary D. Nichols, Chairman, California Air Resources Board</i></p> <p><i>Dr. Mark B. Horton, Director, California Department of Public Health</i></p> <p><i>Wayne Nastri, Regional Administrator, US Environmental Protection Agency, Region 9</i></p>
9:30 a.m. – 10:15 a.m.	<p><b>Federal, State, and Local Perspectives</b> .....Fresno/El Dorado/Diablo</p> <p><b>Moderator: John Kennedy, Homeland Security Coordinator, US Environmental Protection Agency, Region 9</b></p> <p><b>CARPA Member Agency Representatives</b></p> <p>California Air Response Planning Alliance (CARPA) panel will formally introduce CARPA agency members to the conference participants. Panel members will briefly describe their agency's role in emergency response for large hazardous air release incidents, their emergency capabilities, and their expectations for the future as they relate to conference objectives.</p>
10:15 a.m. – 10:30 a.m.	<p><b>Morning Refreshments and Exhibit Viewing</b>.....Granada/Hermosa/Calaveras</p> <p><b>Outdoor Exhibit Viewing/Air Sampling and Laboratory Mobile Units</b>..... North Lobby Valet</p>

# AGENDA

10:30 a.m. – 11:15 a.m.	<b>ICS/SEMS Training—Overview for Emergency Air Responders</b> ..... <i>Fresno/El Dorado/Diablo</i>  <i>Michael Warren, Senior Emergency Coordinator, Office of Emergency Services</i>
11:15 a.m. – 12:30 p.m.	<b>Hosted Luncheon and Presentation</b> ..... <i>California</i> <b>“Air-Borne Emergency Response Procedures”</b>  <i>Dr. Charles Mosher, California Conference of Local Health Officers, Mariposa County Health Department</i>
12:30 p.m. – 1:45 p.m.	<b>Session I – “Data” Presentation</b> ..... <i>Fresno/El Dorado/Diablo</i>  <i>Moderator: Jeff Cook, Emergency Response Coordinator, California Air Resources Board</i>  <i>Ron Baskett, Director of Operations, Lawrence Livermore National Laboratory (LLNL) – National Atmospheric Release Advisory Center/IMAAC</i>  <i>Jason Low, PhD, South Coast Air Quality Management District</i>  <i>Paul Nony, PhD, Manager of Toxicology, Center for Toxicology and Environmental Health</i>  <i>William Robberson, Regional Response Team Coordinator, US Environmental Protection Agency, Region 9</i>  Panelists will give an overview of leading techniques available, their principles of operation, and their strengths and weaknesses. Additionally, panelists will discuss their area of expertise in broad terms aimed at educating the attendees about the concepts and issues of their discipline. This session will highlight the role technical data has in the determinations health officials make of population exposure during an incident.
1:45 p.m. – 2:15 p.m.	<b>Interactive Networking Activity</b> ..... <i>California</i>

# AGENDA

Wednesday, October 15, 2008 (continued)

2:15 p.m. – 3:30 p.m.

**Breakout Session II – “Data to Message” Overview ..... Fresno**

**Moderator: Shelley DuTeaux, PhD MPH**, Emergency Response Coordinator, Office of Environmental Health Hazard Assessment

This session will provide a framework for the issues surrounding the translation of air data into health actions, or “Data to Message.” Participants will hear some real-world examples and challenges of using health-based standards and emergency guidance levels to make rapid decisions about public health emergencies.

**Richard Nickle, MPH**, Emergency Response Agency for Toxic Substances and Disease Registry

Interpreting environmental data and applying that interpretation to specific events, especially emergencies, can be a significant challenge. In emergencies, complete knowledge of factors important to decision making are often not known before those decisions need to be made. One method of meeting this challenge is the use of action levels. Since many important factors may not be known, the development of action levels can be as much art as science. In this presentation, the approach taken by the ATSDR Emergency Response Team in developing environmental action levels is described. Information resources, definition of terms, examples of applications, and assistance offered by ATSDR in emergencies will be discussed.

**Femi Adeshina, PhD**, Senior Scientist, National Homeland Security Research Center, US Environmental Protection Agency

The general public and specific infrastructures may become potentially contaminated with hazardous substances following a terrorist attack. However, there are no appropriate health-based guidelines for building evacuation and re-entry or for drinking water consumption. Hence, pursuant to Homeland Security Presidential Directives #8 and #9, the US EPA National Homeland Security Research Center (NHSRC) is developing health-based provisional advisory levels (PALs) for priority agents. PALs represent general public emergency exposure limits for oral and inhalation exposures corresponding to three different severity levels (1, 2, and 3) for 24-hour, 30-day, 90-day, and 2-year durations. PAL values are evaluated by an EPA working group and an external multidisciplinary panel to ensure scientific credibility. They are intended to be used at the discretion of risk managers in emergency situations when site-specific risk assessments are not available.

# AGENDA

	<p><b>Susan Stone, MS</b>, Human Studies Division, US Environmental Protection Agency</p> <p>This presentation will describe the Air Quality Index (AQI), its structure and function, and supporting health evidence. It will go more specifically into the health basis for the AQI for PM2.5 and how the index can be part of a larger response to emergency situations, as described in the new and improved document for dealing with wildfire or industrial fire emergencies, Wildfire Smoke – A Guide for Public Health Officials. The guidelines in this document can be used by public health officials in any situation where particulate matter levels present an immediate and rapidly changing hazard to the public.</p>
3:30 p.m. – 3:45 p.m.	<p><b>Refreshment Break and Exhibit Viewing</b>.....Granada/Hermosa/Calaveras</p> <p><b>Outdoor Exhibit Viewing/Air Sampling and Laboratory Mobile Units</b>..... North Lobby Valet</p>
3:45 p.m. – 5:00 p.m.	<p><b>Session III – “Message” Presentation</b>.....Fresno/El Dorado/Diablo</p> <p><b>Moderator: Dimitri Stanich</b>, Public Information Officer, California Air Resources Board</p> <p><b>Jay Alan</b>, Communications Deputy Director, California Office of Homeland Security</p> <p><b>Kelly Huston</b>, Deputy Director of Communications, Governor’s Office of Emergency Services</p> <p><b>Leo Kay</b>, Communications Director, California Air Resources Board</p> <p><b>Kerry Shearer</b>, Communications and Media Officer, Sacramento County Public Health Communications Office</p> <p>Emergencies that damage air quality affect large areas with differing sections of society. Multiple agencies are asked to contribute resources and information to protect the public health. Often though, these agencies mobilize redundant resources and send out similar or conflicting information. This panel will relate personal experiences in responding to emergencies in a Public Information capacity, encouraging early creation and/or coordination with Joint Information Centers (JIC). JIC’s are designed to facilitate the connection between accurate information and the media that transmit that information to the public.</p>
5:00 p.m. – 5:15 p.m.	<p><b>Summation of Day One</b> .....Fresno/El Dorado/Diablo</p>

# AGENDA

5:15 p.m. – 6:00 p.m.	<p><b>Refreshments and Exhibit Viewing</b> .....Granada/Hermosa/Calaveras</p> <p><b>Outdoor Exhibit Viewing/Air Sampling and Laboratory Mobile Units</b> ..... North Lobby Valet</p>
6:00 p.m. – 8:00 p.m.	<b>Networking Reception</b> .....John Q. Ballroom (16th Floor)
8:00 p.m.	<b>Open Evening Activities</b>
<b>Thursday, October 16, 2008</b>	
7:30 a.m. – 8:30 a.m.	<p><b>Registration</b>.....Ballroom Foyer</p> <p><b>Exhibit Viewing</b>.....Granada/Hermosa/Calaveras</p> <p><b>Outdoor Exhibit Viewing/Air Sampling and Laboratory Mobile Units</b> ..... North Lobby Valet</p> <p><b>Continental Breakfast and Opening Remarks</b> ..... California</p>
8:30 a.m. – 11:30 a.m.	<p><b>Breakout Session I – “Data”</b> .....El Dorado/Diablo</p> <p><b>Moderator: John Kennedy</b>, Homeland Security Coordinator, United States Environmental Protection Agency, Region 9</p> <p><b>Sim Larkin, PhD</b>, Scientist, United States Forest Service Pacific Northwest Research Station</p> <p><b>Jeff Cook</b>, Emergency Response Coordinator, California Air Resources Board</p> <p><b>Michael Poore</b>, Chief Chemist, Monitoring and Laboratory Division, California Air Resources Board</p> <p><b>Tim Dye</b>, Vice President of Meteorological Programs and Outreach, Sonoma Technology Incorporated</p> <p><b>Ron Baskett</b>, Director of Operations, Lawrence Livermore National Laboratory (LLNL) – Interagency Modeling and Atmospheric Assessment Center</p> <p><b>Philip Campagna</b>, Chemist, US Environmental Protection Agency, Emergency Response Team</p> <p><b>Stephen Wall, PhD</b>, Chief, Outdoor Air Quality Research Program, California Department of Public Health</p> <p><b>William Robberson</b>, Regional Response Team Coordinator, US Environmental Protection Agency, Region 9</p>

# AGENDA

Thursday, October 16, 2008 (continued)

Panelists will discuss in detail the aspects of data collection (monitoring, sampling, laboratory, and modeling) using two sub panels, one for particulate matter and one for gaseous pollutants. Among the topics the panelists will address are more specific analytical tools, modeling, key quality control items, portable instrumentation, and comparability of results among instruments, monitoring strategies, onsite versus central laboratories, data review, data management, and access to information. Participants will also have an opportunity, working in small groups, to develop some consensus on best practices that can be shared with the other breakout sessions, as well as gaps and topics for the future.

8:30 a.m. – 11:30 a.m.

**Session II – “Data to Message” Breakout Session** *Fresno/El Dorado/Diablo*

**Moderator: Shelley DuTeaux, PhD MPH**, Emergency Response Coordinator, Office of Environmental Health Hazard Assessment

**Richard Nickle, MPH**, Emergency Response Coordinator, US Public Health Service/ Agency for Toxic Substances and Disease Registry

**Femi Adeshina, PhD**, Senior Scientist, National Homeland Security Research Center, US Environmental Protection Agency

**Susan Stone, MS**, Human Studies Division, US Environmental Protection Agency

**Ellen Raber, MS**, Program Deputy Manager, CBRNE Countermeasures Program, Lawrence Livermore National Laboratory

**Rupali Das, MD MPH**, Occupational Health Branch, California Department of Public Health

We will discuss in detail the relevance of various health indices for evaluating air monitoring, laboratory, and plume model data and how we interpret these “actionable data” to advise on public health decisions (evacuation, sheltering in place, re-entry, etc.). Our goal is to develop consensus and best practices that we can share with other participants who specialize in data and messaging. Following opening remarks from each panelist, we hope to frame the relevant issues by discussing the following facilitated questions:

1. With the universe of emergency exposure levels and action limits, how do we build defensible decisions with limited time and data?
2. How do we facilitate appropriate decisions about sheltering-in-place and re-entry and what are the issues involved?
3. When we face prolonged exposures, how do we assist with decisions about sustained effects, monitoring populations and workers, and follow-up with affected communities and susceptible populations?
4. Industrial Fires: Which came first, the chemical (chicken) or the PM (egg)? How do we respond to imminent versus perceived health risks?

# AGENDA

Thursday, October 16, 2008 (continued)

8:30 a.m. – 11:30 a.m.

**Breakout Session III – “Message”** ..... Balboa

**Moderator: Dimitri Stanich**, Public Information Officer, California Air Resources Board

**Jay Alan**, Communications Deputy Director, California Office of Homeland Security

**Kelly Huston**, Deputy Director of Communications, Governor’s Office of Emergency Services

**Leo Kay**, Communications Director, California Air Resources Board

**Lisa Fasano**, Communications Director, Bay Area Air Quality Management District

The panel will detail many of the concerns that confront a public information officer (PIO) responding to air quality emergencies. Emergency PIO’s are trained to deliver messages to people enduring enormous stress and whose ability to understand messages may be dramatically reduced. Messages must be extremely simple, clear, and actionable. But to do this they need those who interpret the data, health officers and air quality specialists, to be prepared to synthesize their analysis into an easily understood form. The need to be accurate must be coupled with the need to quickly inform the public with need-to-know information. Also, messages need to be coordinated by the many agencies that will be responding to media requests. This avoids conflicting information and redundant effort. Participants will also have an opportunity, working in small groups, to develop some consensus on best practices that can be shared with the other breakout sessions, as well as gaps and topics for the future.

11:30 a.m. – 12:45 p.m.

**Hosted Luncheon and Decision**

**Makers Panel Discussion** ..... California

**Moderator: John Kennedy**, Homeland Security Coordinator, US Environmental Protection Agency, Region 9

**Dr. Richard Burton**, Public Health Officer, Placer County

**Tom Christofk**, Air Pollution Control Officer, Placer County

**Ed Vasques**, Assistant Chief, Sacramento Fire Department

The purpose of this panel is for people in high level decision making capacities during a large response to give their perspective on what “actionable” information they need to make necessary and effective decisions and for conference participants to ask them questions. Speakers will give brief comments on what their expectations and needs are for actionable information, and relate a real world perspective so that participants can gain an understanding of the realities they would face in an emergency response situation. Speakers will address their comments in the context of the conference themes: Data, Data to Message, and Message.

# AGENDA

12:45 p.m. – 1:15 p.m.	<p><b>Debrief of Morning Breakout Sessions</b> ..... <i>California</i></p> <p><b>John Kennedy</b>, Homeland Security Coordinator, US Environmental Protection Agency, Region 9</p> <p><b>Shelley DuTeaux, PhD MPH</b>, Emergency Response Coordinator, Office of Environmental Health Hazard Assessment</p> <p><b>Dimitri Stanich</b>, Public Information Officer, California Air Resources Board</p>
1:15 p.m. – 1:45 p.m.	<p><b>2007 San Diego Fires – Lessons Learned</b></p> <p><b>Moderator: Jeff Cook</b>, Emergency Response Coordinator, California Air Resources Board</p> <p><b>Bill Brick</b>, Senior Meteorologist, San Diego County Air Pollution Control District</p> <p><b>Dr. Wilma Wooten</b>, Public Health Officer, San Diego County Health and Human Services Agency</p> <p>This session will recount the experiences of two public officials during the massive wildfires that occurred in San Diego County in October 2007. The County underwent a review of its emergency management program after the wildfires of 2003. The panelists will discuss the lessons they learned in the time they spent at the county emergency operations center fulfilling their EOC duties, and meeting their agency responsibilities. They will discuss suggestions for the next time the air district and health department need to work together.</p>
1:45 p.m. – 2:00 p.m.	<p><b>Break and Exhibit Viewing</b> ..... <i>Granada/Hermosa/Calaveras</i></p> <p><b>Outdoor Exhibit Viewing/Air Sampling and Laboratory Mobile Units</b> ..... <i>North Lobby Valet</i></p>
2:00 p.m. – 3:15 p.m.	<p><b>Tabletop Exercise – Air Incident Response</b> ..... <i>California</i></p> <p>The CARPA Tabletop Exercise is designed to give participants an opportunity to exercise emergency response concepts, plans, and capabilities for a multi-jurisdictional response. Participants can “try on” emergency function roles without the urgency or stress of a real incident. The exercise will focus on coordinating actions at the local, state, and federal levels and across disciplines, all with the purpose of building on relationships that may be used in the next air quality emergency.</p>
3:15 p.m. – 3:30 p.m.	<p><b>Refreshment Break and Exhibit Viewing</b> ..... <i>California</i></p>
3:30 p.m.	<p><b>Exhibition Closed</b> ..... <i>Granada/Hermosa/Calaveras</i></p>
3:30 p.m. – 4:00 p.m.	<p><b>Debrief Air Incident Response Tabletop Exercise</b> ..... <i>California</i></p>
4:00 p.m. – 4:30 p.m.	<p><b>Closing Remarks and Next Steps</b></p>
4:30 p.m.	<p><b>Adjourn</b></p>

# PRESENTER BIOGRAPHIES

**Femi Adeshina, PhD** currently serves as a Senior Toxicologist and Director of the health-based Provisional Advisory Levels (PAL) Program at the National Homeland Security Research Center (NHSRC) in US EPA. He has more than 25 years of diverse experience in conducting biological and environmental health research, directing and supervising interdisciplinary professional staff, and managing multi-million dollar health and environmental projects. Dr. Adeshina is an expert on pesticides toxicology and risk assessment, and has conducted innovative research and developed methodologies for risk assessment. He has published numerous reports and monographs on a wide range of toxicological, environmental, and public health issues.

**Jay Alan** was appointed Deputy Director of Communications at Office of Homeland Security by Governor Schwarzenegger in August of 2007. Before that, the Governor appointed Mr. Alan Director of Communications at the California Conservation Corps. Prior to working in public service, Mr. Alan was an anchor and talk show host on Newstalk 1530, KFBK in Sacramento, winning a Mark Twain AP award and part of a team that won an Edward R. Murrow Award. He spent most of his career as a television anchorman and reporter, including stints as main anchorman at KPHO-TV in Phoenix and KTXL-TV FOX40 in Sacramento. He is a graduate of Dordt College in Sioux Center, Iowa with a BA in Communications. He is also a graduate of the CREATE Executive Program in Counter-Terrorism at the University of Southern California.

**Ron Baskett** leads operational responses and outreach at Lawrence Livermore National Laboratory's National Atmospheric Release Advisory Center (NARAC). The NARAC team produces estimates of the potential health effects from major airborne releases of toxic chemical, radiological, biological, or natural hazards. Coordinated by the Department of Homeland Security's IMAAC, federal, state and local emergency response agencies nationwide have access to NARAC's reach back service for incidents requiring federal coordination. Prior to coming to LLNL in 1984, he worked as an air quality consultant in Denver and Southern California and as a satellite meteorologist at the Johnson Space Center. Mr. Baskett holds Bachelor's and Master's degrees in atmospheric science from the University of California at Davis.

**Bill Brick** is the Senior Meteorologist for the San Diego County Air Pollution Control District. Mr. Brick and his group of meteorologists have worked at the San Diego EOC during the 2003 and 2007 firestorms. Providing meteorological outlooks and air quality information to EOC staff and County decision makers. This vital information was used by the San Diego

County Health Department to issue health advisories and press releases. He also performed numerous television, radio, and newspaper interviews during and after the fires to discuss air quality issues related to the fires and cleanup operations. Mr. Brick has more than 25 years' experience in air pollution research and air pollution control. He is a Certified Consulting Meteorologist (CCM), a program of the American Meteorological Society. He holds BS and MS degrees in Meteorology from San Jose State University.

**Richard J. Burton, MD MPH** has been the Health Officer for Placer County for over a decade. While in this position he has participated in numerous multi-disciplinary unified command incident management structures including the county's recent responses to unprecedented levels of air pollution. Dr. Burton has also gained experience in incident management and emergency response during his ten years in the US Navy and one year assignment as Associate Director, California Department of Health Services in 2002.

**Philip Campagna** has worked as a chemist on EPA's Environmental Response Team in Edison, NJ for 23 years. He has conducted air monitoring and sampling at chemical emergencies since 1979 and has worked on more than 500 hazardous waste sites or emergency responses nationally and internationally. Mr. Campagna responded to the World Trade Center, anthrax cleanups in the Capitol and Florida, Hurricanes Katrina and Andrew, the Kuwait oil well fires, Space Shuttle Columbia Recovery, tire fires, mercury spills, and recent volcanic eruptions in Hawaii. Mr. Campagna has a Bachelor of Science in Chemistry.

**Tom Christofk** was appointed the Air Pollution Control Officer for the Placer County Air Pollution Control District in 2002. Prior to this he was a Senior Management Analyst with the Placer County Executive Office, responsible for emergency/incident management and special projects and served as a Planning Section Chief on an Incident Command Team for the California Division of Forestry and Fire Protection. Mr. Christofk currently serves as President of the Western States Trail Foundation, an association dedicated to preserving and maintaining the historic trail through the Sierra's from Lake Tahoe to Auburn and has actively been involved both in competing and directing the annual 100-mile Western States Trail Ride (Tevis) endurance event since 1996. He serves on the Board of Directors for the California Air Pollution Control Officers Association and is a member of the Air and Waste Management Association. Mr. Christofk has a BA in Political Science from Loyola Marymount University of Los Angeles.

# PRESENTER BIOGRAPHIES

**Jeff Cook** is the Emergency Response Coordinator for the California Air Resources Board, and the Chief, Quality Management Branch in the Monitoring and Laboratory Division. He has been with the ARB since 1975 and has worked in the Enforcement, Planning and Technical Support, and Monitoring and Laboratory Division. He has served on numerous national committees on monitoring policy and technical evaluations. Mr. Cook is currently Co-Chair of CARPA. He has been a Branch Chief in the Monitoring and Laboratory Division since the early 90s overseeing the Quality Assurance Program and recently involved with the special projects for ambient dioxin monitoring and naturally occurring asbestos test methods. As Emergency Response Coordinator, he directs the planning and operation of the ARB's emergency response program. He is a member of the Cal/EPA Emergency Response Management Advisory Committee and represents the ARB chair on the Governor's Emergency Operations Executive Council.

**Rupali Das, MD MPH** serves as a physician in the Division of Environmental and Occupational Disease Control, California Department of Public Health (CDPH) and lead for the Division Emergency Response Team. Dr. Das provides technical consultation on issues including occupational aspects of preparedness and response for chemical incidents, pesticide illness, and infectious diseases to physicians, workers, employers, and local and state health agencies. Prior to her tenure at CDPH, she worked at Cal/EPA, developing air exposure levels for response to accidental chemical releases. Dr. Das received her MD degree from the University of Illinois, Chicago, completed a residency in internal medicine at Chicago's Michael Reese Hospital, a fellowship in Occupational and Environmental Medicine at UC San Francisco, and a Master's degree in Public Health from UC Berkeley. She is an Assistant Clinical Professor of Medicine at UCSF. Dr. Das is a lifelong learner and avid gardener.

**Shelley DuTeaux, PhD MPH** joined Cal/EPA in 2005 and is currently a Toxicologist and the Emergency Response Coordinator for Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA). Dr. DuTeaux has worked in the field of environmental health science for over 15 years, being involved in a wide array of investigations and outreach, from lead poisoning to solvent exposures. She also conducted research at Los Alamos and Lawrence Livermore National Laboratories, studying WWII-era 239Pu human experimentation, feasibility comparisons for environmental remediation technologies, and dermal absorption of pesticides. Dr. DuTeaux holds a BA in Communications (University of New Mexico), a Masters in Public Health (University of California, Berkeley), and a PhD in Pharmacology and Toxicology (University of California, Davis).

**Tim Dye** is Vice President of Meteorological Programs and Public Outreach at Sonoma Technology, Inc. (STI). He has BS and MS degrees in meteorology and over 16 years of experience in meteorology, air quality, and boundary layer remote sensing. He is a Certified Consulting Meteorologist by the American Meteorological Society. Mr. Dye oversees the AIRNow Data Management Center that runs at Sonoma Technology's office in Petaluma, California. He has also developed air quality forecasting tools and programs throughout the United States, in Shanghai, China, and in Cairo, Egypt, and was lead author of the World Meteorological Organization's five-day course on air quality forecasting. At STI, Mr. Dye has developed a variety of science-based public outreach tools, including ozone movies, an automated e-mail alert system for unhealthy pollution levels, and a web-based ozone simulator, called Smog City.

**Lisa Fasano** is the Communications Director for the Bay Area Air Quality Management District, the regional, government agency that regulates sources of air pollution within the nine San Francisco Bay Area Counties. Her responsibilities include brand development of the *Spare the Air Every Day Program*, development of an employer program to promote air quality messages, the winter time wood smoke curtailment program and new rule to limit wood burning on declared Spare the Air nights. Additionally, Ms. Fasano writes for the Bay Area Air Quality Management District Air Currents newsletter and is involved in community and climate protection outreach and education. Formerly, Ms. Fasano served as the Senior Public Information Officer for US Environmental Protection Agency, Region 9.

**Kelly Huston** has an interesting, and now diverse, background of experience in government and private sector communications and media relations. Most notably, Mr. Huston has been the face and voice of many of the highest profile events in the nation. He represented the Modesto Police Department during the devastating floods of 1997 and the Yosemite sightseer murder investigation two years later. In January of this year, Mr. Huston was appointed by Governor Schwarzenegger to be the first Deputy Director of Communications for the Governor's Office of Emergency Services. Previously, he served as Governor Schwarzenegger's Deputy Communications Director in the Office of Homeland Security. He managed the Governor's statewide media relations strategy in Homeland Security and served as a department liaison to all of California's public safety agencies. Mr. Huston also spent five years as the Manager of the Stanislaus County Sheriff's Department Media Relations and Legislative Affairs Unit. He provided leadership and direction for the department's designated public information officers and coordinated media outreach.

# PRESENTER BIOGRAPHIES

**Leo Kay** joined the state in July 2007 after spending 13 years working on media relations for the US Environmental Protection Agency in Boston and San Francisco. Since joining ARB, he has spearheaded efforts to publicize the agency's groundbreaking work on climate change and cleaning up diesel pollution. A Berkeley, California native, Mr. Kay has written hundreds of guest columns, speeches and press releases on environmental issues over the past 15 years. He has also served as a spokesman on hundreds of issues, including 9/11, Hurricane Katrina and the Space Challenger disaster. Mr. Kay graduated from San Francisco State with a journalism degree and worked for a couple of years as a news reporter in Alaska and Boston prior to joining the EPA. He also served five years in the US Coast Guard in the 1980s, the last three of which were spent as a public affairs specialist in Southern California.

**John Kennedy** has held the position of Homeland Security Coordinator for US Environmental Protection Agency (EPA) Region 9 in San Francisco, since 2004. As Homeland Security Coordinator, Mr. Kennedy works with the Emergency Response program to develop EPA's disaster preparedness and response capabilities, with special emphasis on developing and managing the Region's Response Support Corps program and Incident Management Teams. The Response Support Corps is made up of Region 9 staff and managers from each of the environmental media programs who have volunteered to assist the Region in responding to large incidents. The majority of the Corp's 150 members have participated in the Katrina and Rita hurricanes, southern CA wildfires, and Cosco Busan oil spill responses, and large exercises such as TOPOFF 4 in 2007. Mr. Kennedy is responsible for forming the Corps through training, exercises, and deployments. Prior to joining the Emergency Response program, he managed the Air Division's Technical Support Office with responsibility for EPA oversight of the region's air monitoring, modeling, data management, and smoke management programs. Mr. Kennedy joined EPA in 1984. Prior to joining EPA, John managed the air monitoring program at Pima County's Air Quality Control District in Tucson, AZ.

**Sim Larkin, PhD** is a scientist with the US Forest Service AirFire Team and the Project Lead for the BlueSky Smoke Modeling Framework, a unique modular modeling system that is being used across the US and internationally to produce real-time predictions of smoke impacts from wildfires. With partners from Sonoma Technology, Inc. and the Desert Research Institute, specialized BlueSky-based predictions were created at the request of fire management for incident response decision support on the October 2007 and summer 2008 California wildfires.

**Jason Low, PhD** graduated with a BS in Biology and BS, MS and PhD in Analytical Chemistry with a specialization in atmospheric chemistry all from the University of California, Irvine. He immediately joined the laboratory at SCAQMD in 2001, working in the PAMS/Air Toxics group and was involved in special monitoring study programs. Also, he administered a contract which enhanced the AQMD field analytical technologies which were incorporated into the ER program, and he coordinated hands-on training and ER information sessions that demonstrated the limitations and capabilities of the AQMD ER program to first responder agencies. After briefly working in the PM2.5 monitoring group, he recently moved to Quality Assurance and has become the lead of the Monitoring and Analysis component of the AQMD ER program.

**Charles Mosher, MD MPH** is a board-certified specialist in Preventive Medicine who has melded together three careers. First, he is the Public Health Officer and Air Pollution Control Officer for Mariposa County, overseeing a dozen different Public Health program activities, including Air Pollution. Second, he has been in the private practice of Medicine for more than 30 years. Finally, he is a writer. His most recent novel, *A Greater Pox*, describes the world's first epidemic of syphilis. He has published several short stories and read some of them on Public Radio. His new novel is set in South America. He has lived and worked in New York, Georgia, Los Angeles, and South America.

**Richard Nickle, MPH** is a graduate of the US Coast Guard Academy, where he received a Bachelor of Sciences in Mathematics, and the University of South Florida, where he received a Masters of Public Health. He is a former Coast Guard Pollution Response Officer for the Captain of the Port, New Orleans, LA. While stationed in New Orleans, he managed the federal response to an average of 6 oil spills per night and 2-3 chemical spills per week. His other duties included Pollution Prevention Officer responsible for the safe handling of marine bulk cargoes, Respiratory Protection Officer, and Assistant Safety Officer for the unit. After leaving the Coast Guard, Mr. Nickle worked for Tetra Tech, Inc. as a senior project manager and regional health and safety officer for the company's Midwest Regional Office in Kansas City, KS. While at Tetra Tech, Mr. Nickle served as assistant team leader for the Environmental Protection Agency's (EPA) Region 7 Technical Assistance Team (TAT) and as a project manager for EPA's Technical Enforcement Support (TES) Phase IV and X Contractor.

# PRESENTER BIOGRAPHIES

Mr. Nickle is currently an Emergency Response Coordinator with the US Public Health Service/Agency for Toxic Substances and Disease Registry. He is responsible for identifying health issues raised during hazardous materials incidents. He then organizes a team to assess the health impacts and recommend further actions. He assists risk managers, such as Federal On-scene Coordinators and Fire Service Incident Commanders, by evaluating the health implications of response options to alleviate or mitigate adverse health impacts. He has worked in the Coast Guard's Pollution Response Program, EPA's Removal Program, EPA's Remedial Program, EPA's Enforcement Program, and the Health and Human Services Emergency Response Program.

**Paul Nony, PhD** has more than ten years' training and experience in toxicological matters related to human health and the environment. He performs health risk assessments in situations where potential chemical exposures may threaten the health of people and the environment. In addition, Dr. Nony is called upon by industry and local and state governments to provide toxicological support during emergency responses and in worker exposure incidents. This support includes performing critical toxicological and environmental assessments, assisting local health care providers, assisting with the development of site safety and air monitoring plans, and communicating toxicological issues with the media, communities, affected workers, and medical staff. Dr. Nony is also an Assistant Professor in the Department of Environmental and Occupational Health in the College of Public Health at the University of Arkansas for Medical Sciences.

**Michael Poore** has twenty-five years' experience in ambient air laboratory method development and analyses of particulate and toxic air contaminants. Mr. Poore has also been an environmental analytical chemist for thirty-eight years. Mr. Poore's laboratory was involved in analyzing air samples from the Tracy tire fire and the chemical spill into the Sacramento River near Dunsmir.

**Ellen Raber** is currently the Deputy Program Manager for CBRNE Countermeasures within the Global Security Directorate at Lawrence Livermore National Laboratory (LLNL), Livermore, CA. This program includes threat assessment and reach-back, biological, chemical and radiological detection and response, risk and consequence management, and WMD forensics and attribution programs. This is a \$160M program involving work for DHS, DOD, EPA and other federal agencies. Ms. Raber was also previously the Department Head of the Environmental Protection Department at Lawrence Livermore National Laboratory (LLNL), responsible for both operational and applied R&D efforts in hazardous and radioactive waste

management, environmental restoration, pollution prevention, and environmental monitoring and analysis. Throughout her 20 year career at LLNL, Ms. Raber, has been actively involved in development of state-of-the-art environmental sampling and monitoring techniques for both environmental regulatory applications, as well as applications for international treaty verification and nuclear safeguards. Her current research efforts include the development of restoration and decontamination methods, decisions, and response protocols to be employed in the event of a chemical or biological incident including an emphasis on "How Clean is Clean Enough?" She has published in numerous peer-reviewed publications.

**CDR Bill Robberson** has been with US Environmental Protection Agency, Region 9, for more than 22 years; he is a Commissioned Officer in the US Public Health Service and a Licensed Civil Engineer (P.E. – Professional Engineer) in CA. Mr. Robberson is the EPA Region 9 Regional Response Team Coordinator, a response support and coordinating body comprised of federal, state and tribal representatives and participants from industry and local agencies. He is also the Region 9 Incident Management Team (IMT) Command Liaison Officer. In response to Hurricanes Katrina and Rita, Mr. Robberson was one of the first EPA responders deployed in the field. Mr. Robberson subsequently made several deployments to LA over the following seven months—his various assignments included Drinking Water System Technical Assistance and Assessment Operations, Reconnaissance (Operations) Branch Chief, Air (Operations) Boss, and Unified Command Liaison Officer. More recently, in November 2007, he was the Unified Command Liaison Officer beginning on day three of the Cosco Busan Oil Spill Response in San Francisco Bay. Mr. Robberson is also a Region 9 representative to the EPA Information Technology Forum, a national EPA workgroup addressing emergency response information and data management issues, policies, standards and applications.

**Kerry Shearer** is Communications and Media Officer for the Sacramento County Public Health Division. He was previously in charge of communications for the Sacramento Metropolitan Air Quality Management District's "Spare the Air" education and outreach program. Mr. Shearer has a background in radio news and television production. When wildfire smoke inundated the Sacramento region this summer, Sacramento County Public health worked closely with the Sacramento Metropolitan Air Quality Management District to communicate health statements and health impact information to the public using a variety of means, including news interviews, YouTube videos, web sites and AQMD's Air Alert electronic notification system.

# PRESENTER BIOGRAPHIES

**Dimitri Stanich** has served as an information officer for the California Air Resources Board since 2000 and has managed outreach campaigns for a variety of issues including listing environmental tobacco smoke as a toxic air contaminant, reduction of diesel emissions from ocean going vessels, as well as the recent California wildfires. He has also served as a freelance photographer and graphic designer in the Sacramento area. Mr. Stanich received a Bachelor of Arts Degree in Communication Studies from California State University, Sacramento.

**Susan Stone** has worked as an Environmental Health Scientist with EPA's Office of Air Quality Planning and Standards on the reviews of the national ambient air quality standards for ozone, particulate matter, and sulfur dioxide since 1994. Ms. Stone is the Air Quality Index (AQI) team leader, has co-authored many of EPA's public information documents about the AQI and the health effects of criteria pollutants, and the multi-agency document Wildfire Smoke—A Guide for Public Health Officials. She has given presentations across the US and internationally on these subjects, including a course at the United Nations Commission on Sustainable Development. She is the co-lead for the National-Scale Activity Survey (N-SAS) which will evaluate the effectiveness of AQI advisories in changing public behavior. Ms. Stone has an MS from the School of Public Health at the University of North Carolina at Chapel Hill.

**Ed Vasques** is an Assistant Chief with the Sacramento Fire Department. He currently serves as the Chief of Special Operation where he oversees the HAZMAT response teams, a National Urban Search and Rescue Task Force and the department's technical rescue assets. Mr. Vasques also serves on the Sacramento FBI's Joint Terrorism Task Force under the WMD Coordinator. Mr. Vasques has been on the Sacramento Fire Department's HAZMAT team for 25 years. This year marks his 28th year with the fire department during which time he responded to the Northridge earthquake, the Oklahoma City bombing, the summer Olympics in Atlanta, the winter Olympics in Salt Lake City and Hurricane Katrina as a HAZMAT Specialist. He also has responded to the 9/11 attack on the World Trade Center as the Task Force Leader for US&R CATF-7 and the UPRR Trestle Fire in Sacramento as the Operations Chief.

**Stephen Wall, PhD** is the Chief of the Outdoor Air Quality Research Program for the California Department of Public Health, which is located at the Richmond Marina Bay Laboratory Campus. The OAQ Research Program has a staff of eight research scientists, which conducts ground breaking environmental forensic investigations, to elucidate the sources and environmental fate of toxic airborne releases to assess the potential for human exposure. These investigations employ state-of-the-art instrumentation including spectrometers, electron microscope imaging, as well as, a mobile laboratory for post incident community air quality surveillance. Dr. Wall received his BS in physical chemistry from the University of California at Davis, and his MS and PhD in Engineering Science Aerosol Physics from the University of California at Berkeley. He is the author of more than 50 scientific publications, and has presented over 30 research papers at international conferences concerning the characterization of toxic airborne releases.

**Michael Warren** has worked for the Governor's Office of Emergency Services for more than ten years. He is currently a Senior Emergency Services Coordinator in the Hazardous Materials Unit and works in hazardous material multi-agency coordination, emergency planning, emergency response, and community right-to-know programs. He is also the grant administrator for the US DOT Hazardous Material Emergency Preparedness (HMEP) Grant. Mr. Warren is a qualified emergency manager and has a variety of disaster response experience in field, local, state, and federal emergency operations centers. He has a Bachelor of Science in Physical Science from CSU, Chico.

**Wilma Wooten, MD MPH** is the Public Health Officer for San Diego County, and is a board-certified physician in family medicine. She holds a Master's degree in public health. Dr. Wooten practiced medicine as a faculty member of the University of California, San Diego (UCSD), Department of Family and Preventive Medicine for 11 years. Her research interests focused on women's health and included studies to assess the risk factors and prevalence of cardiovascular disease. In this position, she has helped to develop the "Reduce or Eliminate Health Disparities with Information" (REHDI) Project that has brought together more than 70 community partners to develop strategies to address the 6 health disparity areas identified by the Department of Health Services. Additionally, she is medical director for the Office of AIDS Coordination, Laboratory Services for the Regional Public Health Centers of the County, and Medical Quality Assurance Programs.

# EXHIBITORS

On behalf of the CARPA Summit Committee, please join us in acknowledging the outstanding exhibitors participating in the CARPA Summit 2008. We especially ask that you visit the Exhibition Hall in the Granada, Hermosa and Calaveras rooms, as well as the Air Sampling and Laboratory Mobile Units in the North Lobby Valet.

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## AIR SAMPLING AND LABORATORY MOBILE UNITS OUTDOOR EXHIBITION.....North Lobby Valet

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### California Air Resources Board

Charles Pearson  
P.O. Box 2815  
Sacramento, CA 95814  
Phone: (916) 532-3112  
Email: cpearson@arb.ca.gov

The ARB Emergency Response Team is capable of providing monitoring, modeling, meteorological, and laboratory services. Information is viewable at ARB Field Information Center vehicle.

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### California Department of Public Health

Dr. Stephen Wall  
850 Marina Bay Parkway, G-365  
Richmond, CA 94804  
Phone: (510) 620-2818  
Email: swall@cdph.ca.gov

The CDPH Outdoor Air Quality Program conducts environmental forensics, employing innovative laboratory methods research, to elucidate sources of human exposure to airborne toxicants in the outdoor environment. As a specific focus, protocols and standard instrument operating procedures to characterize a potential chemical threat agent are developed for community exposure assessment following an airborne chemical release.

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### California National Guard, 9th Civil Support Team

SFC Scott Yates  
11302 Independence Road  
Los Alamitos (JFTB), CA 90720  
Phone: (562) 254-8299  
Email: scott.a.yates@us.army.mil

California National Guard, 9th Civil Support Team, on order, deploys to a suspected or known WMD incident to support civil authorities at a domestic chemical, biological, radiological, nuclear, and high yield explosives (CBRNE) incident. Identify CBRNE agents and substances, assess current and projected consequences, advise on response

measures and assist with appropriate requests for federal and state support, in order to help save lives, prevent human suffering and mitigate property damage.

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### Sacramento Fire Department

Jerry Apodaca  
3230 J Street  
Sacramento, CA 95816  
Phone: (916) 246-8835  
Email: japodaca@sfd.cityofsacramento.org

Sacramento Fire Department, an All Risk Organization with a Commitment to Excellence in Enhancing and Protecting Life, Property, and the Environment.

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### USEPA Environmental Response Team

Philip Campagna  
Building 18 – MS 001 2890 Woodbridge Avenue  
Edison, NJ 08837  
Phone: (732) 321-6689  
Email: campagna.philip@epa.gov

The Trace Atmospheric Gas Analyzer (TAGA) is a self-contained mobile (bus) laboratory capable of real-time sampling and analysis in the low parts per billion level of outdoor air or emissions from various environmental sources and concerns. In addition, the TAGA has specialized sampling equipment for measuring indoor air and at remote locations.

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## EXHIBITION HALL.....Granada/Hermosa/Calaveras

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### ADASHI

Meghan Pullarn  
100 Walter Ward Boulevard, Suite 100  
Abingdon, MD 21009  
Phone: (410) 569-6081  
Email: mpullarn@adashi.org

ADASHI's all new version 3.0 provides an all-hazards software platform for managing, communicating, and responding to critical incidents. It combines proven incident response and command tools in a networked emergency management system. ADASHI is widely recognized for its exceptional ease of use with its clear, intuitive touch-screen interface.

# EXHIBITORS

## **AIRSIS**

Cole Morten  
9845 Via Pasar  
San Diego, CA 92127  
Phone: (858) 586-0933  
Email: alavorgna@airsis.com

AIRSIS automates the collection and analysis of environmental data through satellite communications and the Internet. Our Air Quality Communicators integrate directly with instruments from Met One, Campbell Scientific, and Thermo Electron. Our web-based dashboards are used by Port Authorities and numerous federal, state, and municipal agencies.

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## **BGI Instruments**

Tom Merrifield  
58 Guinan Street  
Waltham, MA 02451  
Phone: (781) 891-9380  
Email: tmerrifield@bgiusa.com

BGI Instruments is an aerosol research company providing solutions for thirty years by supplying ambient particulate and calibration instrumentation. All BGI instruments are battery operated, portable, United States Environmental Protection Agency approved, and require no tools for assembly.

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## **California Department of Public Health**

Dr. Stephen Wall  
850 Marina Bay Parkway, G-365  
Richmond, CA 94804  
Phone: (510) 620-2818  
Email: swall@cdph.ca.gov

The CDPH Outdoor Air Quality Program conducts environmental forensics, employing innovative laboratory methods research, to elucidate sources of human exposure to airborne toxicants in the outdoor environment. As a specific focus, protocols and standard instrument operating procedures to characterize a potential chemical threat agent are developed for community exposure assessment following an airborne chemical release.

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## **Coastal Environmental Systems, Incorporated**

Jim McGregor  
820 1st Avenue South  
Seattle, WA 98134  
Phone: (800) 488-8291  
Email: jmcgregor@coastalenvironmental.com

For more than twenty years, Coastal Environmental Systems has manufactured the only portable weather stations designed specifically for HazMat and First Responders – WEATHERPAK® and C-5 SAM™. Both of these systems automatically update plume modeling software and are designed to withstand the rigors of public safety, military, and industrial applications.

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## **Lawrence Livermore National Laboratory (LLNL) NARAC/IMAAC**

Ronald Baskett  
7000 East Avenue  
Livermore, CA 94550  
Phone: (925) 423-6731  
Email: baskett@llnl.gov

Located at Lawrence Livermore National Laboratory (LLNL), the National Atmospheric Release Advisory Center (NARAC) provides tools and expert services to map the spread of hazardous material accidentally or intentionally released into the atmosphere. NARAC supports all types of hazards and is the primary provider for the DHS-led Interagency Modeling and Atmospheric Assessment Center (IMAAC). When activated, IMAAC is the single point for the coordination and dissemination of federal dispersion modeling and hazard prediction products that represent the federal position. NARAC/IMAAC predictions provide information on affected areas and populations, potential casualties, health effects, and protective action guides to assist decision makers and responders.

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## **Met One Instruments**

David Gobeli  
1600 Washington Boulevard  
Grants Pass, OR 97526  
Phone: (541) 244-4602  
Email: dgobeli@metone.com

Met One Instruments is the manufacturer of the E-BAM - the only portable particulate monitor available utilizing beta attenuation. Met One also manufactures the BAM-1020, the only continuous PM2.5 monitor possessing US-EPA PM2.5 FEM designation.

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# EXHIBITORS

## **RAE Systems**

Lonny Toby  
3775 North First Street  
San Jose, CA 95134  
Phone: (408) 952-8200  
Toll free: (877) 723-2878  
Email: ltoby@raesystems.com

RAE Systems is a leading global developer and manufacturer of rapidly deployable chemical and radiation detection monitors and multi-sensor networks for homeland security and industrial applications. RAE Systems' technologically advanced products are based on proprietary technology, and include a full line of portable, wireless and fixed atmospheric monitors and photoionization detectors and gamma and neutron radiation detectors for the detection and early warning of hazardous materials.

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## **SAFER Systems**

Jeff Branche  
5141 Verdugo Way, Suite B  
Camarillo, CA 93012  
Phone: (805) 383-9711  
Email: dneff@safersystem.com

SAFER Systems is the global leader in chemical emergency response solutions, providing Fortune 500 corporations and government entities with emergency response management, consequence analysis, and software engineering. SAFER Systems is a system integrator and can provide a scalable application designed for anything from small repackaging facilities to major industrial sites to entire countries.

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## **Thermo Fisher Scientific**

Jim Morton  
National Sales Manager  
200 R Hembree Park Drive  
Roswell, GA 30076  
Phone: (770) 380-3363  
Email: jim.morton@thermofisher.com

Airborne particulate, including biological and gas monitors for quantifying and identifying unknown gases, dusts, mists and vapors. Formerly branded MIE DataRam, MIRAN and TVA portable light-scattering, IR and FID/PID instruments. Instruments used by Coast Guard, VA, military and CDC for emergency response investigations.

## **USDA Forest Service**

Trent Procter  
1839 South Newcomb  
Porterville, CA 93257  
Phone: (559) 784-1500  
Email: tprocter@fs.fed.us

The US Forest Service Air Quality Program has developed an emergency response air monitoring program that responds to wildland fire episodes. We have tailored equipment and data delivery for real time in order to allow a very fast deployment and data response.

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## **US Environmental Protection Agency**

John Kennedy  
75 Hawthorne Street (SFD 9)  
San Francisco, CA 94105  
Phone: (415) 947-4129  
Email: kennedy.john@epa.gov

EPA's Region 9 Air Program guides the federal management, implementation, enforcement and technical oversight of ambient air quality and indoor air quality, including control of pollution from stationary and mobile sources, prevention of radiation exposure and protection of the stratospheric ozone layer.

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## **US Environmental Protection Agency**

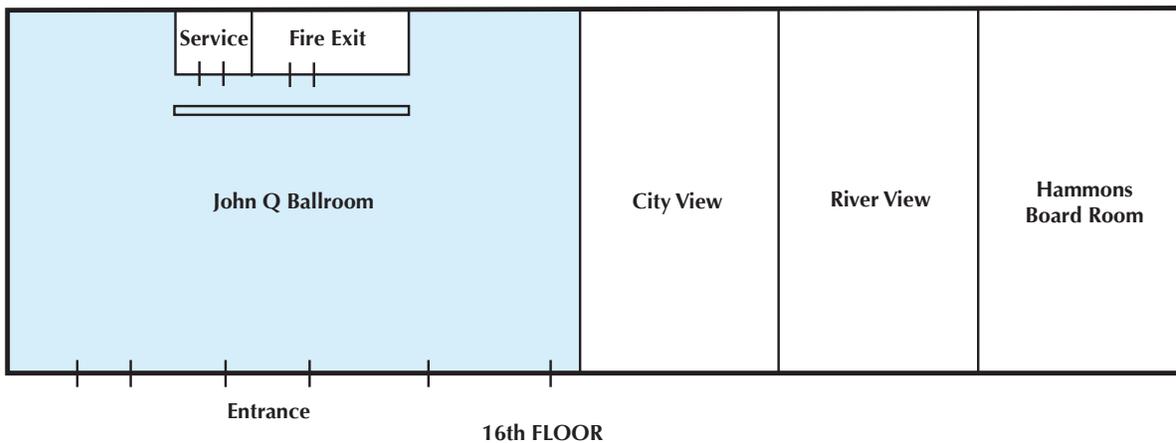
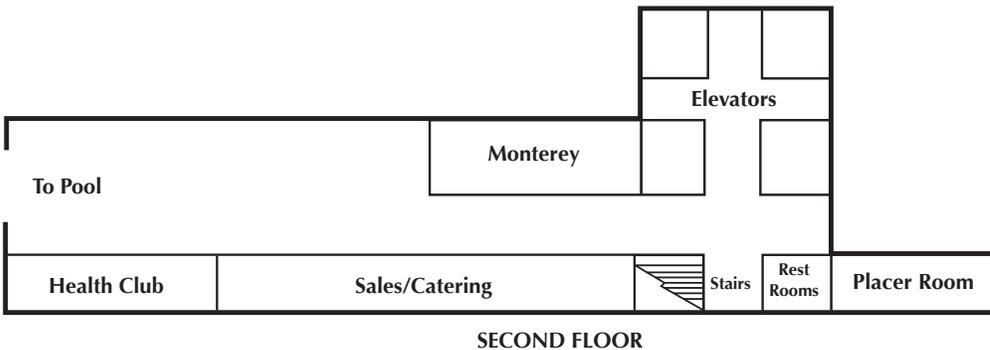
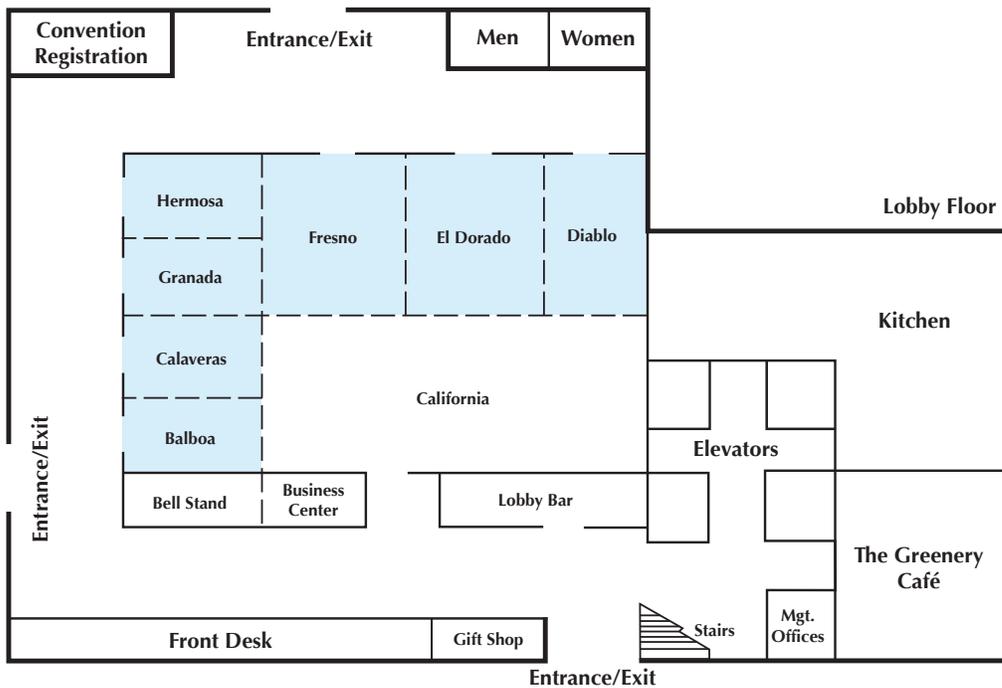
Dan Shane, FOSC  
75 Hawthorne Street  
San Francisco, CA 94105  
Phone: (415) 972-3037  
Email: shane.dan@epa.gov

AIRNow is the US EPA's real-time air quality data and forecast system. AIRNow receives data and forecasts from hundreds of air quality agencies at the State, local, Tribal, and International levels. That data is quality assured and transformed into a variety of products, all within one hour, 24 hours a day, seven days a week. The airnow.gov website serves as the public's resource for air quality data, forecasts, and health information.





# FACILITY MAP





**CARPA** | Air Resources Board | California Environmental Protection Agency  
1927 13th Street | Post Office Box 2815 | Sacramento, California 95814 | Telephone 916.323.4294  
[www.arb.ca.gov/ertcomm/ertcomm.htm](http://www.arb.ca.gov/ertcomm/ertcomm.htm)

**CARPA Summit 2008 Conference Facilitation and Planning**

**Center for Collaborative Policy**, California State University, Sacramento | 916.341.3323

**Conference and Training Services**, College of Continuing Education,  
California State University, Sacramento | 916.278.4433



## Air Quality in Emergency Response:

### *Monitoring, Modeling, Messaging, and Media*

#### CARPA Steering Committee Members

California Air Resources Board, Governor's Office of Emergency Services, US EPA- Region 9, Agency for Toxic Substances and Disease Registry (Regional Office), Lawrence Livermore National Laboratory (LLNL)/National Atmospheric Release Advisory Center (NARAC)/ Interim Interagency Modeling and Atmospheric Assessment Center (IMAAC), California Air Pollution Control Officer's Association, Office of Environmental Health Hazard Assessment, California Conference of Local Public Health Officers, California National Guard 95th Civil Support Team, Department of Public Health, Sacramento City Fire Department Special Operations Unit, and California Environmental Protection Agency.

**CARPA | Air Resources Board**  
**California Environmental Protection Agency**  
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